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<!--StartFragment-->RESULT 4
AAY82326
ID   AAY82326 standard; protein; 357 AA.
XX
AC   AAY82326;
XX
DT   21-JUN-2000  (first entry)
XX
DE   Human arginase I SEQ ID NO:17.
XX
KW   Human; arginase II; arginase I; diagnosis; hypotensive; hypertensive;
KW   uropathic; cytostatic; neuroprotective; gene therapy; hypertension;
KW   nitric oxide biosynthesis modulator; urea cycle disease; hypotension;
KW   episodic hyperammonaemia; hyperargininaemia; spasticity; prostatitis;
KW   growth retardation; progressive mental impairment; prostate disease;
KW   prostate cancer; benign prostatic hyperplasia; hypertrophy;
KW   prostate damage; kidney disease; kidney damage.
XX
OS   Homo sapiens.
XX
PN   US6054308-A.
XX
PD   25-APR-2000.
XX
PF   15-JUL-1998;   98US-00116115.
XX
PR   14-MAR-1996;   96US-0013395P.
PR   20-AUG-1996;   96US-00700186.
PR   20-AUG-1997;   97US-00914981.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   Dillon PJ,  Vockley JG;
XX
DR   WPI; 2000-328355/28.
DR   N-PSDB; AAA08074.
XX
PT   Novel human arginase II polypeptides useful for treating urea cycle
PT   diseases, hypertension, hypotension, episodic hyperammonemia, to control
PT   nitric oxide formation and kidney damage.
XX
PS   Example 1; Col 49-52; 37pp; English.
XX
CC   The present invention describes human arginase II. Arginase II has
CC   hypotensive, hypertensive, uropathic, cytostatic and neuroprotective
CC   activities, and can be used in gene therapy and as a nitric oxide
CC   biosynthesis modulator. Human arginase II proteins can be used to treat
CC   diseases associated with or caused by a defect in the arginase II gene or
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CC arginase II gene expression, such as, for e.g. urea cycle diseases,
CC hypertension, hypotension, episodic hyperammonaemia, defects in
CC biosynthesis of proline, glutamate, nitric oxide and ornithine, as well
CC as hyperargininaemia and its related spasticity, growth retardation, and
CC progressive mental impairment, and prostate disease, particularly
CC prostate cancer, prostatitis and benign prostatic hyperplasia or
CC hypertrophy, and also prostate damage, kidney disease and kidney damage.
CC It is also used to control nitric oxide formation in an individual.
CC Arginase II or its fragments, variants or derivatives can be used as
CC diagnostic reagents for diagnosing arginase II deficiency in an
CC individual having or suspected of having a defect in the nitric oxide
CC pathway and the urea cycle. The genes encoding arginase II are used in
CC gene therapy techniques to treat the above mentioned disorders. It is
CC also used to deplete systemic arginine levels in an individual. The
CC present sequence represents human arginase I, which is used in an example
CC from the present invention
XX
SQ Sequence 357 AA;

Query Match 100.0%; Score 1678; DB 3; Length 357;
Best Local Similarity 100.0%; Pred. No. 2.4e-162;
Matches 322; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 MSAKSRTIGIIGAPFSKGQPRGGVEEGPTVLRKAGLLEKLKEQECDVKDYGDLPFADIPN 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         18 MSAKSRTIGIIGAPFSKGQPRGGVEEGPTVLRKAGLLEKLKEQECDVKDYGDLPFADIPN 77

Qy         61 DSPFQIVKNPRSVGKASEQLAGKVAQVKKNGRISLVLGGDHSLAIGSISGHARVHPDLGV 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         78 DSPFQIVKNPRSVGKASEQLAGKVAQVKKNGRISLVLGGDHSLAIGSISGHARVHPDLGV 137

Qy        121 IWVDAHTDINTPLTTTSGNLHGQPVSFLLKELKGKIPDVPGFSWVTPCISAKDIVYIGLR 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        138 IWVDAHTDINTPLTTTSGNLHGQPVSFLLKELKGKIPDVPGFSWVTPCISAKDIVYIGLR 197

Qy        181 DVDPGEHYILKTLGIKYFSMTEVDRLGIGKVMEETLSYLLGRKKRPIHLSFDVDGLDPSF 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        198 DVDPGEHYILKTLGIKYFSMTEVDRLGIGKVMEETLSYLLGRKKRPIHLSFDVDGLDPSF 257

Qy        241 TPATGTPVVGGLTYREGLYITEEIYKTGLLSGLDIMEVNPSLGKTPEEVTRTVNTAVAIT 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        258 TPATGTPVVGGLTYREGLYITEEIYKTGLLSGLDIMEVNPSLGKTPEEVTRTVNTAVAIT 317

Qy        301 LACFGLAREGNHKPIDYLNPPK 322
              ||||||||||||||||||||||
Db        318 LACFGLAREGNHKPIDYLNPPK 339
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<!--EndFragment-->